

ABSTRACT

A wireless local loop system manages radio data transmission capacity and network resources shared by a plurality of subscriber stations by considering the type of connections desired to be created to the subscriber stations and the radio data transmission capacity, and in some cases QoS parameters, and network resources required for those connections. The subscriber stations include data and telephony ports and can include a subscriber utilization client (SUC) to assist in the management process. The SUC in each subscriber station communicates with a network utilization manager (NUM) to request network resources from the base station. The NUM determines the requirements, in data transmission capacity and/or QoS levels, for the desired connection and considers the utilization of the network resources at the base station, or sector of the base station, in determining whether to establish the desired connection. The NUM can consider the required level and a desired level of data transmission capacity and/or QoS levels and allocate resources for the connection according to either level, or therebetween. The SUC and NUM can prioritize the establishment of connections on an appropriate basis, including the type of connection, the parties to the connection, the revenue potential of the connection and the port for the connection at the subscriber station, etc.